

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

LINDA HAUCK, *as personal
representative of the Estate of
Deborah A. Chambers,*

Plaintiff,

vs.

No. CV 18-471 KG/LF

WABASH NATIONAL CORPORATION,

Defendant.

MEMORANDUM OPINION AND ORDER

Deborah Chambers died after her automobile struck a tractor-trailer on Route 66 in Torrance County, New Mexico. (Doc. 121) at 4. Plaintiff Linda Hauck, Ms. Chambers' surviving sister, filed this lawsuit against the tractor-trailer manufacturer, Defendant Wabash National Corporation (Wabash), alleging negligence and strict liability. *Id.* at 1, 3. In support, Ms. Hauck alleges that Wabash knew, or reasonably should have known, that the tractor-trailer that caused Ms. Chambers' fatal injuries was unreasonably dangerous and defective. *Id.* at 5-8. As a result, Ms. Hauck seeks both pecuniary and punitive damages against Wabash. *Id.* at 9.

Presently before the Court is Wabash's Motion to Exclude Plaintiff's Expert Testimony Regarding Design Defect Claim (Motion) (Doc. 136). The Motion is now fully and timely briefed. *See* (Doc. 144, Response, Doc. 148, Reply). The Court notes jurisdiction under 28 U.S.C. § 1332. After review of the parties' briefing and the relevant law, the Court grants in part and denies in part Wabash's Motion (Doc. 136).

I. Background

In the late evening of September 6, 2016, Ms. Chambers' Chrysler PT Cruiser collided with the side of a Wabash tractor-trailer. (Doc. 121) at 4.¹ During the collision, a portion of Ms. Chambers' car drove under, or "under-rode," the tractor-trailer, causing the roof of her vehicle to collapse onto her head and neck. (Doc. 136) at 2. Ms. Chambers was severely injured in the accident, and later died in the hospital from her injuries. (Doc. 121) at 4. Ms. Hauck serves as the personal representative of Ms. Chambers' estate, and, as such, alleges that Wabash's tractor-trailer was defective and unreasonably dangerous because it did not "incorporate any shield [or] guard ... to prevent vehicles ... from under-riding the side." *Id.* Ms. Hauck contends that Wabash "should have attached a side impact guard (SIG) to its trailer" to prevent vehicle under-riding. (Doc. 136) at 2. The parties dispute the economic and practical feasibility of installing SIGs on tractor-trailers to prevent vehicle under-riding.

In support of her claims for relief, Ms. Hauck presents testimony from two experts, Stephen Batzer and Perry Ponder. *Id.* Both experts concluded that Wabash's tractor-trailer was unreasonably dangerous "due to the height of the floor in relation to the passenger compartment of most automobiles." *Id.* In addition, both experts opined that "a feasible design for a SIG existed in 2003, when the subject trailer was manufactured." *Id.* In its present Motion, Wabash urges this Court to exclude Dr. Batzer and Mr. Ponder's expert opinions concluding that a feasible alternative design existed at the time the tractor-trailer was manufactured. *See* (Doc. 148) at 12.

1. Importantly, Wabash manufactures only the "trailer," not the "tractor" or "cab" portion of the truck. The Court uses the phrase "tractor-trailer" to conform with, and illustrate, the colloquial understanding of commercial U.S. "trailers."

II. Standard

Federal Rule of Evidence 702 governs the admissibility of expert testimony, directing that:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Under Rule 702, a district court must conduct a two-step “gatekeeping” analysis to determine the admissibility of expert opinions. *Kumho Tire, Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999) (citing *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579 (1993)); *Milne v. USA Cycling, Inc.*, 575 F.3d 1120, 1134 (10th Cir. 2009). First, a court must assess whether the expert is “qualified,” by ascertaining their “knowledge, skill, experience, training, or education.” *LifeWise Master Funding v. Telebank*, 374 F.3d 917, 928 (10th Cir. 2004) (citing Fed. R. Evid. 702). For an expert to be deemed qualified under the Federal Rules, their testimony must be “relevant” to the issues before the court. *Daubert*, 509 U.S. at 591. Second, a court must determine whether the expert’s opinion is “reliable.” *Id.* at 593-94. An expert’s opinion must be both relevant and reliable to be admissible. *Milne*, 575 F.3d at 1134.

The party that proffers the expert testimony bears the burden of proving its compliance with Rule 702 by a preponderance of the evidence. Fed. R. Evid. 702 Advisory Committee Note (2000) (citing Fed. R. Evid. 104(a)). Nonetheless, a court should liberally admit expert testimony. *United States v. Gomez*, 67 F.3d 1515, 1526 (10th Cir. 1995) (citing *Daubert*, 509 U.S. at 588). Furthermore, a court is afforded broad “discretion in determining the competency of an expert.” *Id.* at 1525 (internal citation omitted).

III. Discussion

Wabash seeks to exclude the opinions of both Dr. Batzer and Mr. Ponder on the basis that “the designs to which they refer were not technologically or economically feasible in 2003” and their opinions “are contrary to the data on which they are purportedly based.” (Doc. 136) at 2. In support, Wabash presents two grounds on which this Court should reject the experts’ testimony: (1) Dr. Batzer is unqualified; and (2) the opinions are not grounded “in a technically sound foundation” and are, thus, unreliable. *Id.* at 3. The Court determines it has sufficient evidence—over 1,000 pages of attached exhibits, including the experts’ credentials, reports, and designs—to evaluate the testimony without a hearing. *See Dodge v. Cotter Corp.*, 328 F.3d 1212, 1228 (10th Cir. 2003) (explaining that “district court has discretion to limit the information upon which it will decide the *Daubert* issue.”).

A. Whether Dr. Batzer is Qualified to Offer an Expert Opinion

First, Wabash argues that, while Dr. Batzer holds undergraduate and doctorate degrees in mechanical engineering, his engineering experience is not related to “the area of trailer design.” (Doc. 136) at 11. Further, Wabash contends that Dr. Batzer admitted “he has never designed a trailer, he has never served on any committees regarding standards applicable to trailers, and he has never published any articles regarding trailer design.” *Id.* As a result, Wabash asserts that Dr. Batzer is unqualified to serve as an expert on the subject matter of this case, regarding the applicability of side guards on tractor-trailers to prevent vehicle under-riding. *Id.*

To qualify as an expert, a witness must possess “such skill, experience or knowledge in that particular field as to make it appear that his opinion would rest on substantial foundation and would tend to aid the trier of fact in his search for truth.” *Taber v. Allied Waste Systems, Inc.*, 642 Fed. Appx. 801, 807 (10th Cir. 2016) (quoting *LifeWise Master Funding*, 374 F.3d at 928).

An expert “should not be required to satisfy an overly narrow test of his own qualifications.” *Gardner v. General Motors Corp.*, 507 F.2d 525, 528 (10th Cir. 1974) (citing Fed. R. Evid. 702 Advisory Committee Note (1972)). Nonetheless, an expert must “stay[] within the reasonable confines of his subject area.” *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 970 (10th Cir. 2001); *see also Taber*, 642 Fed. Appx. at 807 (same).

In this way, an expert may not rely on “general principles and concepts” to be qualified under *Daubert*. *Ralston*, 275 F.3d at 970 (internal citation and brackets omitted). Resultingly, merely possessing a degree in a particular field or having “some marginal familiarity with general concepts,” may be deemed insufficient to satisfy *Daubert*’s standards for expert admissibility. *Id.* at 969 (concluding district court did not err in finding expert unqualified who “knew little—if anything—about the subject,” and had “done no research” on topic); *see also Taber*, 642 Fed. Appx. at 807 (holding that district court did not abuse its discretion in finding expert unqualified who “conducted an estimated one thousand investigations” in his field but “could recall working on only one case” similar to that at issue before court).

Dr. Batzer has both a Ph.D. and B.S. in mechanical engineering, and an M.S. in manufacturing systems engineering. (Doc. 136-1) at 2. Presently, Dr. Batzer is the President of Batzer Engineering, Inc., and is certified as a professional engineer in Michigan. *Id.* Dr. Batzer has authored, or co-authored, over seventy peer-reviewed articles, and eleven other articles and “public comments.” *Id.* at 5-10. Moreover, Dr. Batzer has taught over two dozen university-level courses in engineering, manufacturing, and mechanical design. *Id.* at 10-11.

Regarding the implementation of side guards and the mechanical engineering of tractor-trailers specifically, Dr. Batzer has attended or hosted three training courses and conferences, including: the Michigan Association of Traffic Accident Investigators Fall Training Conference

on Passenger Vehicle Under Ride, in October 2019; the “Truck Underride Roundtable,” sponsored by the Insurance Institute for Highway Safety Vehicle Research Center, in May 2016; and the “Ride–n–Drive” Presentation, detailing OnGuard Collision Safety Systems, in September 2011. (Doc. 136-1) at 3. Dr. Batzer has also authored, or co-authored, at least five papers on the subject, including: “Forensic Engineering Analysis of a Fatal Trailer-Wheel Separation Failure,” published in the Journal of the National Academy of Forensic Engineers, in 2017; “Rollover Protective Structural Criteria for Heavy Trucks,” published in ICrash, in 2010; and “Heavy Truck Roll Cage Effectiveness,” published in the ASME International Mechanical Engineering Congress & Exposition, in 2009. *Id.* at 5-7. In addition, Dr. Batzer co-authored a Comment to the National Highway Traffic Safety Administration (NHTSA) entitled “Federal Motor Vehicle Safety Standards 223 (Rear Impact Guards) & 224 (Rear Impact Protection) for Semi-Trailers,” in 2016, detailing both his “analysis and unpublished testing.” *Id.* at 10. Finally, Dr. Batzer was an invited speaker at a short course on the “Use and Limitations of the SAE DIM Formula for Side Under Ride Velocity Estimation,” with the Michigan Association of Traffic Accident Investigators at a Fall Training Conference on Passenger Vehicle Under Ride, in 2019. *Id.* at 11.

In addition to his academic and research studies on this topic, Dr. Batzer has also patented two side-guard designs for tractor-trailers. *Id.* at 3. Wabash disputes the weight this Court should afford to Dr. Batzer’s patented research because the patents were developed at the request of plaintiff’s counsel in an accident-related tractor-trailer lawsuit. *See* (Doc. 136-2) at 11-12. At his deposition, Dr. Batzer explained, “the attorney asked [him and his colleague] to design an underride guard.” *Id.* After the design was created for litigation purposes, Dr. Batzer and his colleague “decided to patent it.” *Id.* at 12. He explains that he and his colleague “did all the work [themselves],” and he “paid for the [patent] application fees and everything.” *Id.* at 13.

Prior to patenting his designs in 2014 and 2015, he also “developed guards before in [his] work in [the] industry but nothing for a trailer.” *Id.* at 13-14.

While Dr. Batzer’s specialty is mechanical engineering more broadly, he has conducted enough academic research in tractor-trailer guards over the last decade to qualify him as an expert in this case. Indeed, Dr. Batzer’s authorship of several scholarly articles, attendance and presentations at national training seminars, and independent research, evidence that he has thoroughly studied the topic at issue here, to assist the jury in understanding SGI and tractor-trailer side guards to prevent vehicle under-riding. Perhaps most notably, Dr. Batzer has been repeatedly recognized in the mechanical engineering field as an authority on this topic, as evidenced by his invitations to discuss vehicle under-riding at different seminars and events nationwide. *See* (Doc. 144-4) at 4 (explaining he “was an invited speaker” at an event “which was solely focused on the crash aspects of commercial vehicles under ridden by passenger vehicles”).

In addition, the Court is unpersuaded by Wabash’s contention that because the research for Dr. Batzer’s two patents were funded through litigation efforts, they are less demonstrative of his academic scholarship and expertise in side-guard barriers. As Dr. Batzer explained, the decision to patent the research was his own, and the patents were funded by himself and his colleague, unrelated to any litigation. The Court is, therefore, persuaded that Dr. Batzer has far more than “general familiarity” with SGIs and the under-ride risks associated with tractor-trailers, as evidenced by his patented research, recognition in his field, and submissions to this Court on his Resume, affidavits, and deposition testimony. *See Ralston*, 275 F.3d at 970 (requiring expert possess more than “general familiarity” with subject matter). As a result, the

Court concludes that Dr. Batzer is qualified to testify as an expert witness on tractor-trailer side guard barriers to prevent vehicle under-ride in this case.

B. Whether the Opinions are Reliable

Next, Wabash contends that Dr. Batzer and Mr. Ponder's opinions regarding the economic and technical feasibility of an alternative design for tractor-trailer SGIs are unreliable. (Doc. 136) at 12. Given the unreliability of their proffered design alternatives, Wabash urges this Court to exclude their testimony. *Id.* In response, Ms. Hauck contends Dr. Batzer and Mr. Ponder present reliable designs that are both technologically and economically feasible, and their testimony should, therefore, be admitted. (Doc. 144) at 20-21. Ms. Hauck contends that Wabash's arguments speak more to the weight the trier of fact should afford their opinions, rather than their general admissibility. *Id.* at 21.

Under New Mexico law, a plaintiff may recover on a theory of strict products liability if "an unreasonable risk of injury resulting from a condition of the product or from a manner of its use ... makes the product defective." *McDonald v. Zimmer, Inc.*, 2020-NMCA-020, ¶ 26, 461 P.3d 930 (citing UJI 13-1406 NMRA). In this context, "an unreasonable risk of injury is a risk which a reasonably prudent person having full knowledge of the risk would find unacceptable." *Bustos v. Hyundai Motor Co.*, 2010-NMCA-090, 149 N.M. 1, at *12 (citing UJI 13-1406 NMRA). In reaching its determination, a jury "is required to make risk-benefit calculations," which weigh, among other factors, "the ability to eliminate the danger without seriously impairing the usefulness of the product or making it unduly expensive." *Id.* at *13. As part of this consideration, a plaintiff may present evidence of a reasonable alternative design to support their claim. *Id.* at *14 (explaining plaintiff must do more than "come to court and merely criticize a product").

Both Dr. Batzer and Mr. Ponder present alternative designs, which they claim could have been installed on Wabash's tractor-trailers to render them less dangerous and less susceptible to causing fatal accidents like the one at issue here. (Doc. 136) at 5-10. Wabash contends the experts' alternative designs are unduly expensive and impracticable and, therefore, are unreliable to support their opinion that an alternative design existed to render Wabash's tractor-trailers less dangerous. *Id.* at 9. Specifically, Wabash explains that Dr. Batzer's design has never been built and would cost "17% of the total cost of the subject trailer." *Id.* at 7. Wabash contends that Dr. Batzer's SGI prototype, if constructed, would weigh an estimated 1,515 pounds. *Id.* In contrast, Mr. Ponder has designed and constructed an SGI, "known as AngelWing." *Id.* at 9. Mr. Ponder's AngelWing "weighs approximately 650 pounds," and costs between \$2,500-\$2,900 at current market value. *Id.*; *see also* (Doc. 144-2) at 4 (estimating "cost percentage of adding a side guard was 2% relative to its sales price"). Mr. Ponder estimates that "ten to twelve AngelWings have been sold." (Doc. 136) at 9.

In determining whether an expert's opinion is reliable, a court "must assess the reasoning and methodology underlying the expert's opinion...." *United States v. Rodriguez-Felix*, 450 F.3d 1117, 1123 (10th Cir. 2006) (internal citation omitted). To make this determination, a court may consider:

- (1) Whether the theory at issue can be and has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether there is a known or potential rate of error and whether there are standards controlling the methodology's operation; and (4) whether the theory has been accepted in the relevant scientific community.

Id. (citing *Daubert*, 509 U.S. at 593-94). A court is not required "to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 886 (10th Cir. 2005). For instance, an expert's opinion is not

reliable simply because he says it is reliable. As a result, a court “may conclude that there is simply too great an analytical gap between the data and the opinion proffered.” *Id.*

Wabash presents two theories to exclude Mr. Ponder and Dr. Batzer’s expert testimony as unreliable. First, Wabash contends the experts’ opinions regarding a safer alternative design have never been subject to physical testing. (Doc. 136) at 19. Second, Wabash argues that the designs are not generally accepted in the scientific community and are the product of Mr. Ponder and Dr. Batzer’s advocacy efforts against tractor-trailer manufacturers, rather than reliable engineering or rigorous scientific study. *Id.* at 19-20. As a result, Wabash asserts that, because the experts’ designs are not economically feasible or practical, the experts’ reliance on these prototypes in reaching their conclusions render their opinions inadmissible. *Id.*

In support of its argument, Wabash directs this Court to two federal district court cases where the court concluded that Mr. Ponder’s proffered expert testimony regarding the implementation of sideguards to prevent vehicle under-riding on tractor-trailers was deemed inadmissible. *See id.* at 17-18. Most notably, in 2018, United States District Judge David Hale analyzed Mr. Ponder’s expertise in opining on the admissibility of a feasible alternative design for “telescoping sideguards” on tractor-trailers. *See Wilden v. Laury Trans., LLC*, 2016 WL 4522670, at *3 (W.D. Ky). Judge Hale noted that because of the “complexities behind industrial equipment” and “the extensive testing necessary to prudently test under-ride side guards prior to retail,” Mr. Ponder’s “relatively minimal testing” weighed against admission of his opinion on alternative side-guard designs. *Id.* at *4. The court concluded that Mr. Ponder’s opinion, therefore, “regarding proposed telescoping side guards [is] not sufficiently reliable in the absence of adequate testing.” *Id.* at *3.

Judge Hale also opined that Mr. Ponder's prototype "has never been built" and was, thus, not "accepted and in use within the relevant industry." *Id.* at *4. As a result, the court found that *Daubert's* "general acceptance factor ... weighs against admitting [Mr.] Ponder's ... testimon[y]." *Id.* Judge Hale also noted that Mr. Ponder's proffered design "did not grow naturally and directly out of research the expert had conducted independent of this litigation." *Id.* As a result, he found that Mr. Ponder's testimony "fail[s] to meet any of the relevant *Daubert* factors" and his opinion was, thus, "unreliable" and "inadmissible under FRE 702." *Id.* at *5.

In 2018, the United States Court of Appeals for the Sixth Circuit affirmed Judge Hale's decision in a detailed 18-page opinion. *See Wilden v. Laury Trans., LLC*, 901 F.3d 644 (6th Cir. 2018). The Sixth Circuit's opinion extensively discussed the engineering and design challenges associated with implementing tractor-trailer side guards to prevent vehicle under-riding. *See id.* at 649-56. Specifically, the Sixth Circuit noted that "underride protection presents a complex engineering challenge," and relied on the NHTSA's standards for implementing rear-guard protectors in analyzing Mr. Ponder's proposed design. *Id.* at 650. That court noted "the key engineering challenge in designing such a guard involves a trade-off between the strength of a rear guard and its capacity to absorb its energy." *Id.* (citing *Rapp v. Singh*, 152 F.Supp. 2d 694, 696 (E.D. Pa. 2001)).

The Sixth Circuit explained that "[t]oo strong and the guard will stop cars too quickly; too flexible and the guard will not adequately prevent underride. Underride protection must therefore strike a careful balance between rigidity and energy absorption." *Id.* The Court noted that "designing underride protection is complicated and crash testing helps get it right." *Id.* at 651. As a result, the Court concluded that "physical prototype testing helps find that balance,"

and “dynamic crash testing played an important role in the development of the federal standards for rear underride guards, which are now an industry standard.” *Id.* at 650.

In applying these considerations to Mr. Ponder’s proposed side-guard design for preventing vehicle under-ride, the Sixth Circuit opined that “there is [] reason to believe that designing side underride protection ... is even more complicated than rear underride protection.” *Id.* Thus, the Court reasoned, “physical-prototype testing is even more important in this context.” *Id.* The Sixth Circuit continued to explain that Mr. Ponder’s “concept [] exists only in theory, rendered on paper and in computers, but never given physical harm.” *Id.* Therefore, the Court concluded, “[p]articularly due to the difficulty of achieving the right balance between strength and flexibility—as demonstrated by the history of rear-guard regulation—and the even greater difficulties of designing side guards, it made good sense for the district court to require some physical testing on the facts of this case.” *Id.*

This Court is persuaded by Judge Hale’s decision and clear reasoning, and the reasoning discussed by the Sixth Circuit in *Wilden*, in conjunction with pertinent Tenth Circuit precedent. Most notably, Dr. Batzer’s proffered alternative design has never been created and, thus, has never been subject to physical testing. *See* (Doc. 144) at 15. Instead, “Dr. Batzer’s report include[s] design drawings ... [and] computer stimulation testing.” *Id.* To rebut this contention, Ms. Hauck alleges that *Wilden* “is inapplicable” because it involved “a telescoping feature of a side guard to prevent underride, an addition to a side guard which had never been physically built or tested.” *Id.* at 17. Despite this purported distinction, Ms. Hauck does not assert that Dr. Batzer’s proposed alternative design has ever been “physically built or tested,” and she does not explain how Dr. Batzer’s current “telescoping impact rail design” is any different than the

“telescoping feature of a side guard” rejected by the Sixth Circuit in *Wilden*. See (Doc. 144-4) at 6.

The Court finds that the lack of market availability of these alternative designs, and their limited real-life consumer crash testing, renders them less reliable. It is difficult to accept the engineers’ premise that these products are evidence of a safer alternative design when they are not in use on the road—*e.g.*, there are no concrete figures from tractor-trailer manufacturers using these products and their actual life-saving capability. This is not to conclude, however, that every product which comes before this Court must undergo roadside testing before it may be admitted. Indeed, Ms. Hauck attempts to make this argument in her briefing, by attaching a decision authored by this Court where it permitted expert testimony on a feasible alternative design in a strict liability action. See (Doc. 144) at 18; (Doc. 144-1) at 1 (citing *Rivera v. Volvo Cars of North America, LLC.*, 2015 WL 11118064 (D.N.M.) (Gonzales, J.)).

As *Daubert* and its progeny make clear, it is the specific facts of each case that inform a court’s decision regarding admissibility of expert testimony. See *Paris v. Ford Motor Co.*, 2007 WL 4967217, at *5 (D.N.M.) (explaining that “expert must be qualified to opine regarding the *specific* issues raised in this case”) (emphasis added); *Hartzler v. Wiley*, 277 F.Supp. 2d 1114, 1116 (D. Kan. 2003) (explaining that “Court examines *specific* subject areas of proposed expert testimony”) (emphasis added). The inquiry is plainly fact and circumstance dependent, and the expert testimony this Court previously admitted in a case involving a “power right front window system switch” is not determinative in this case, regarding a side-guard to prevent vehicle under-riding. See *Rivera*, 2015 WL 11118064, at *2.

In particular, the power-window alternative design at issue in *Rivera* was significantly more developed, and in use in the automobile industry for several years before the Court

concluded that the alternative design was reliable. *See id.* at *7 (concluding that plaintiff's expert, in 2015, may testify about an alternative design feature found in 2001 Volkswagen vehicles). In concluding that the expert's alternative design was reliable, the Court noted that the testing plaintiff's expert relied on "became mandatory [under the NHTSA] for all vehicle manufactures for sale in the United States on or after October 1, 2008." *Id.* at *9. Even before the testing became "mandatory" in 2008, the "NHTSA permitted voluntary compliance." *Id.* Plaintiff's expert in *Rivera* opined that the testing methodology he relied on, and the alternative design that he proposed through use of these testing methods, was "the industry standard" for tractor-trailer manufacturers. *Id.*

In this case, however, the side-guard attachment for tractor-trailers remains a relatively new concept, not widely used in the industry, and complicated in design. Thus, the Court concludes that requiring the designs to undergo some form of physical use on the road before admitting it before the jury is reasonable, and is ultimately consistent with this Court's gatekeeping responsibility commanded by *Daubert* and its prior decision in *Rivera*. Plainly stated, there is a reasonable distinction between design prototypes for a product that is already widely in use, with years of research in support, and the side-guard protectors proposed here. *See id.* (explaining plaintiff's expert "utilized industry-accepted surrogate testing" to support his opinion).

Nonetheless, the Court's consideration of whether the experts' alternative designs have been subjected to testing is only one factor in determining whether their opinions are reliable. *See Norris*, 397 F.3d at 884 (citing *Daubert*, 509 U.S. at 593-94). The Court also considers whether Dr. Batzer and Mr. Ponder's theories are "generally accepted" in the mechanical engineering community. *Id.* Dr. Batzer's prototype, upon which he bases his opinion, is not

generally accepted, because no tractor-trailer manufacturers are currently using it. In addition, while Mr. Ponder has sold some of his side-guard protectors, only “ten or twelve” are currently in use. *See* (Doc. 136-8) at 26; *see also* (Doc. 144-4) at 6 (explaining Mr. Ponder’s design “is currently in limited production”). Notably, Mr. Ponder explained that just one tractor-trailer manufacturer, Strick Trailer, “made over 10,000 trailers ... in the year 2000.” (Doc. 144-2) at 4. Through Mr. Ponder’s own estimations, he has sold roughly one side-guard protector each year—resulting in approximately .0001% of tractor-trailers annually produced by one manufacturer equipped with such a device.

Ms. Hauck does not allege that use of this product on a dozen commercial tractor-trailers renders them generally accepted in the mechanical engineering community under *Daubert*. *See Daubert*, 509 U.S. at 594 (explaining that “known technique which has been able to attract only minimal support within the community may properly be viewed with skepticism”). It is difficult for this Court to conclude that a product is “generally accepted” when nearly no manufacturer in the field uses it, and when they are not widely available for general acceptance in the relevant industry to be obtained. *See* (Doc. 136-2) at 7 (Dr. Batzer explaining that “I’m not sure that I have ever seen [a typical box van] on the road with a guard”). The Court finds this factor informative, here, and concludes that this evidence weighs against concluding that the experts’ premises are reliable.

Furthermore, Ms. Hauck proffers that the experts’ alternative designs, despite not being built and not commercially available when Wabash manufactured its tractor-trailer, were “technologically feasible.” (Doc. 144) at 19. In support, Ms. Hauck explains that “each and every component that makes up Dr. Batzer’s patented side impact guard [and Mr.] Ponder’s AngelWing” have “long existed in the industry.” *Id.* The Court is not persuaded that, merely

because the materials existed to craft these products, there is a logical nexus to conclude that such a device was technologically feasible. There is no evidence that feasibility requires only a metaphysical possibility existing merely in the abstract. *See* Merriam-Webster Dictionary, *Definition of Feasible*, <https://www.merriam-webster.com/dictionary/feasibility>, (last visited Jan. 28, 2021) (defining “feasible” as “capable of being done or carried out; capable of being used or dealt with successfully; reasonable, likely”).

In addition, both Dr. Batzer and Mr. Ponder designed their side-guard protectors for use during prior litigation. While this factor is not dispositive on its own, it further supports the Court’s conclusion regarding the scientific reliability of the experts’ proffered opinions. *See Squires ex rel. Squires v. Goodwin*, 829 F.Supp. 2d 1041, 1050 (D. Colo. 2011) (explaining that “no single factor should be considered dispositive in weighing the reliability of an expert’s opinions”). Ms. Hauck’s own exhibits demonstrate this conundrum.

Specifically, Ms. Hauck attaches a news excerpt which explains that “safety advocates hope to accomplish in court what they have not been able to in Congress.” (Doc. 144-2) at 38; *see also* (Doc. 136-6) at 8 (advancing that “Wabash and its industry partners ... have for years provided themselves collective cover by doing nothing to address the side underride danger except using their resources to lobby, provide disinformation, create doubt and fight in court”). The Court notes this fact in considering whether the experts’ opinions here grow “naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying.” *See Ramirez v. Isuzu Motors Ltd.*, 2001 WL 37125055, at *3 (D.N.M.) (quoting *Daubert v. Merrell Dow Pharm, Inc.*, 43 F.3d 1311, 1316-17 (9th Cir. 1995)).

Both Dr. Batzer and Mr. Ponder use their designs and prototypes to support their broader conclusion that an alternative design existed that was economically feasible, which could have prevented Ms. Chambers' fatal injuries in this case. The undisputed facts and data that the engineers utilize to support this premise, however, is not supportive of their overall conclusion. *See Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1233 (10th Cir. 2005) (explaining that "when the conclusion simply does not follow from the data, a district court is free to determine that an impermissible analytical gap exists between premises and conclusion"). The parties agree that implementation of these designs would be costly, decrease the amount of cargo a tractor-trailer could haul, and increase fuel costs. (Doc. 148) at 4; (Doc. 136-8) at 29 (explaining "more the guard weighs, the worse your fuel economy"). Ms. Hauck explains that "when something is designed for the first time, it can cost a fair amount of money for a single guard; yet, when production level is obtained, the cost can be spread out over hundreds if not thousands of products, gaining efficiencies of mass production." (Doc. 144) at 20. There is no evidence today, however, that any side-guard technology has reached the efficiency level of "mass production." Thus, by Ms. Hauck's own admission, these products continue to "cost a fair amount of money." *See id.*

Moreover, because tractor-trailer regulations currently do not require installation of side-guard barriers, there is no evidence that any tractor-trailer company would install such a mechanism, even if they were widely available and economically viable. *See Wilden*, 901 F.3d at 647 (affirming district court's exclusion of expert testimony, in part, because "[n]on-telescoping, fixed-position side guards exist, though they are not an industry standard and are not legally required"). Wabash further illustrates this difficulty, through explaining that all current loading docks in the United States are built around the federal regulations and dimensions

governing tractor-trailers. *See* (Doc. 136-8) at 29-30 (explaining that “van trailers have basically been manufactured with the same dimension for close to a century ... in terms of floor height”). Thus, even if such a product was available for use and economically feasible to install, there is limited evidence that it could be applied to trailers without requiring construction and design of new loading docks. *Compare* (Doc. 136-2) at 7 (explaining that “typical box van that we think of, that pulls up to a loading dock and has a deck which is 4 feet off of the ground about, those typically do not have guards on them”) *with* (Doc. 136-8) at 23 (explaining that with side-guard device installed, ground clearance is “over a foot”). Without a viable loading dock for trailers with the side-guard attachments in tow, it is hard to accept the premise that such a design would be technologically feasible for loading and unloading cargo, the central purpose of employing tractor-trailers on the road. *See* (Doc. 136-3) at 28 (explaining that “commercial trailer is designed to provide transportation utility for its owner” and “[c]lass VIII [t]ractor-trailer combinations are used solely for commercial endeavors”).

The Court notes that its examination is not focused on the viability of the conclusion reached—that a safer alternative design was both economically feasible and technologically available for Wabash’s tractor-trailer. *See Hollander v. Sandoz Pharma. Corp.*, 289 F.3d 1193, 1205 (10th Cir. 2002) (explaining that “[g]enerally, the district court should focus on the experts’ methodology rather than the conclusions that they generate”). Instead, the Court’s inquiry focuses on what data the engineers used to reach this conclusion: their submitted and patented design plans, the financial data they deduced, and the feasibility of installing this mechanism that they extrapolate from market prices. Nonetheless, with the lack of on-the-road data collection these products have sustained, the evidence that they are not economically feasible, and the overall conclusion that they are not generally accepted design alternatives for tractor-trailers in

the industry, the Court recognizes the analytical gap in the engineers' conclusions. *Id.* (explaining that "experts' conclusions are not immune from scrutiny: a court may conclude that there is simply too great an analytical gap between the data and the opinion proffered") (internal citation omitted). Indeed, it is one thing to conclude that an alternative design exists in the abstract, but it is another to extrapolate from this premise that such a design is economically and technologically feasible for Wabash to install based on the specific facts of this case. *See id.* at 1205 (opining that "inference or assertion must be derived by the scientific method ... and must be supported by appropriate validation—*i.e.*, good grounds based on what is known") (internal brackets omitted) (citing *Daubert*, 509 U.S. at 590); *see also Bitler*, 400 F.3d at 1233 (explaining that "it is not always a straightforward exercise to disaggregate method and conclusion").

In summary, the designs supporting Dr. Batzer and Mr. Ponder's expert opinions fail to satisfy *Daubert*'s requirements for admissibility. Because this central element of the experts' reports are unreliable, their expert opinions on this issue must be excluded. The Court is not satisfied that Ms. Hauck, as the proponent of the expert testimony, has demonstrated that Dr. Batzer and Mr. Ponder's opinions are based on reliable engineering and scientific study, because their alternative designs are not generally accepted, subject to road-side testing or crash-worthiness data from use on the road, and were created in support of litigation. The Court further notes the analytical gap between the experts' premises and the conclusions they reach, ultimately opining that the alternative designs are both technologically and economically viable for installation. Thus, the Court concludes that both experts' opinions are unreliable and inadmissible under Rule 702.

IV. Conclusion

In conclusion, the Court holds that Dr. Batzer is qualified to testify as an expert on under-ride side protectors for tractor-trailers. However, the Court finds that Dr. Batzer's opinion regarding a feasible alternative design is not reliable, because it has never been crash-tested, and it is not generally accepted in the mechanical engineering community—namely, it is not currently utilized on tractor-trailers in any capacity. Similarly, the Court concludes that Mr. Ponder's AngelWing design is not generally accepted in the relevant community, because of its limited use and production. Finally, the Court concludes that the experts' designs were prepared for purposes of litigation, a factor which supports the unreliability of their ultimate conclusions.

IT IS, THEREFORE, ORDERED that Defendant Wabash National Corporation's Motion to Exclude Plaintiff's Expert Testimony Regarding Design Defect Claim (Doc. 136) is granted in part and denied in part. Dr. Batzer and Mr. Ponder's expert opinions that an economically and technologically feasible alternative design existed to prevent vehicle under-riding are not reliable and, thus, inadmissible under Federal Rule of Evidence 702. The remainder of the experts' opinions, unchallenged by Wabash, are admissible. In addition, the ultimate question of the weight the absence or existence of an alternative design should be afforded in the cost-benefit calculus for liability remains pending for consideration before the trier of fact.



UNITED STATES DISTRICT JUDGE